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EXAMINER

BOWES, SARA E

ART UNIT PAPER NUMBER

2136

DATE MAILED: 02/10/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

8m

Office Action Summary

Application No.

09/688,375

Applicant(s)

CANDELORE ET AL.

Examiner

Sara Bowes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: the inventor(s) signatures are absent.

Specification

The use of the trademark OpenCable™ has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112, First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11-12, 17-18 and 20-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s)

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contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Referring to claim 11, the specification does not describe a second and third computing resource.

Referring to claim 12, this claim is also rejected because it is dependent on claim 11 and therefore inherits its deficiencies.

Referring to claim 17, the specification does not describe a second computing resource to couple the ISO 7816 smart card interface to the NRSS-B protocol.

Referring to claim 18, this claim is also rejected because it is dependent on claim 17 and therefore inherits its deficiencies.

Referring to claim 20, the specification does not describe a second CA protocol nor did it describe a second and third computing resource.

Referring to claims 21-24, these claims are also rejected because they are dependent on claim 20 and therefore inherit its deficiencies.

Claims 17-18 and 20-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Referring to claim 11, the specification does not describe a second and third computing resource and thus does not enable one skilled in the art to make and/or use the invention.

Referring to claim 12, this claim is also rejected because it is dependent on claim 11 and therefore inherits its deficiencies.

Referring to claim 17, the specification does not describe a second computing resource to couple the ISO 7816 smart card interface to the NRSS-B protocol and thus does not enable one skilled in the art to make and/or use the invention.

Referring to claim 18, this claim is also rejected because it is dependent on claim 17 and therefore inherits its deficiencies.

Referring to claim 20, the specification does not describe a second CA protocol nor did it describe a second and third computing resource and thus does not enable one skilled in the art to make and/or use the invention.

Referring to claims 21-24, these claims are also rejected because they are dependent on claim 20 and therefore inherit its deficiencies.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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Claims 1-2, 4-14, and 19-24 are rejected under 35 U.S.C. 102(a) as being anticipated by Microsoft 1999.

Referring to claim 1, Microsoft 1999 teach a conditional access (CA) system comprising:

- a computing resource configured to run a CA protocol [page 5, Resource Manager, lines 3-5];
- a smart card interface [page 6, Readers, lines 1-2]; and
- a software wrapper configured to couple the smart card interface to the CA protocol [page 3, Software Development, line 1].

Referring to claim 2, Microsoft 1999 teach the CA system of claim 1, wherein the smart card interface complies substantially with International Organization for Standardization standard 7816 (ISO 7816) [page 2, ISO 7816, EMV, and GSM, lines 1-3].

Referring to claim 4, Microsoft 1999 teaches the CA system of claim 1, wherein the software wrapper is configured to run on the computing resource [page 3, Software Development, line 1-2].

Referring to claim 5, Microsoft 1999 teaches a smart card interface comprising:

- a smart card receptacle for coupling to a smart card to communicate smart card signals [page 5-6, Device Drivers, lines 3-5];

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- a Personal Computer Memory Card International Association (PCMCIA) Application Programming Interface (API) [page 6, Readers, line 2]; and
- wrapper software interfacing the smart card signals and the PCMCIA API [page 3, Software Development, lines 3-4].

Referring to claim 6, Microsoft 1999 teaches the smart card interface of claim 5, where the PCMCIA API is a CA API [page 6, Readers, line 3].

Referring to claim 7, Microsoft 1999 teaches the smart card interface of claim 6, where the smart card signals are received from an ISO 7816 smart card [page 2, ISO 7816, EMV, and GSM, lines 1-3].

Referring to claim 8, Microsoft 1999 teaches a conditional access (CA) system comprising:

- means for executing a CA program [page 5, Resource Manager, lines 3-5];
- means for coupling to a smart card interface [page 6, Readers, lines 1-2]; and
- means for executing, interfacing software [page 5-6, Device Drivers, lines 3-5].

Referring to claim 9, Microsoft 1999 teaches the system of claim 8 wherein interfacing software comprises:

- means for coupling to smart card signals [page 2, ISO 7816, EMV, and GSM, lines 1-3];
- means for coupling to the CA program API [page 5-6, Device Drivers, lines 3-5]; and

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- means for routing the smart card signals to and from the CA program [page 5, Resource Manager, lines 3-5].

Referring to claim 10, Microsoft 1999 teaches a conditional access (CA) method comprising:

- routing signals received from a smart card interface to interface software [page 5-6, Device Drivers, 3-4];
- coupling an output of the interface software to an API of a CA protocol [page 5-6, Device Drivers, 4-5];
- coupling an output of the CA protocol to an input of the interface software [page 5-6, Device Drivers, 4-5]; and
- routing output signals of the interface software to the smart card interface [page 5, Resource Manager, lines 1-3].

Referring to claim 11, Microsoft 1999 teaches a conditional access (CA) method comprising:

- routing smart card signals to interface software executing on a first computing resource [page 5-6, Device Drivers, lines 3-4];
- coupling the inputs and outputs of the interface software to a CA protocol executing on a second computing resource [page 5-6, Device Drivers, lines 4-5]; and
- executing a software wrapper program on a third computing resource coupling a smart card interface to the CA protocol [page 5-6, Device Drivers, lines 3-4].

Referring to claim 12, Microsoft 1999 teaches the method of claim 11 wherein the first computing resource, the second computing resource, and the third computing resource are a common computing resource [page 5-6, Device Drivers, lines 3-5, (Resource Manager)].

Referring to claim 13, Microsoft 1999 teaches a method for interfacing to a conditional access protocol, the method comprising:

- receiving signals and data from a smart card interface [page 5-6, Device Drivers, 3-4];
- transforming the received signals and data from the smart card interface into a format compatible with the conditional access protocol [page 5-6, Device Drivers, 4-5];
- presenting the transformed received signals and data from the smart card interface to a conditional access system implementing the conditional access protocol [page 5, Cards , paragraph 3, lines 5-6];
- receiving from the conditional access system signals and data [page 5, Resource Manager, lines 3-5];
- transforming the received signals and data from the conditional access system into a format compatible with the smart card interface [page 5-6, Device Drivers, 4-5]; and
- presenting the transformed received signals and data from the conditional access system to the smart card interface [page 5-6, Device Drivers, 3-4].

Referring to claim 14, Microsoft 1999 teaches the method of claim 13 wherein the smart card interface is an ISO 7816 smart card interface [page 2, ISO 7816, EMV, and GSM, lines 1-3].

Referring to claim 19, Microsoft 1999 teaches a machine-readable program storage medium tangibly embodying information allowing a machine to perform a method for conditional access, the method comprising:

- receiving signals and data from a smart card interface [page 5-6, Device Drivers, 3-4];
- transforming the received signals and data from the smart card interface into a format compatible with the conditional access protocol [page 5-6, Device Drivers, 4-5];
- presenting the transformed received signals and data from the smart card interface to a conditional access system implementing the conditional access protocol [page 5, Cards , paragraph 3, lines 5-6];
- receiving from the conditional access system signals and data [page 5, Resource Manager, lines 3-5];
- transforming the received signals and data from the conditional access system into a format compatible with the smart card interface [page 5-6, Device Drivers, 4-5]; and
- presenting the transformed received signals and data from the conditional access system to the smart card interface [page 5-6, Device Drivers, 3-4].

Referring to claim 20, Microsoft 1999 teaches a conditional access (CA) system comprising:

- a first computing resource configured to execute a first CA protocol [page 5, Resource Manager, lines 3-5];
- a second computing resource configured to execute a second CA protocol [page 5-6, Device Drivers, lines 4-5]; and
- a third computing resource configured to couple the first computing resource to the second computing resource [page 6, Device Drivers, paragraph 2, lines 1-2].

Referring to claim 21, Microsoft 1999 teaches the conditional access (CA) system of claim 20 wherein the second CA protocol is not an industry standard CA protocol [page 5, Device Drivers, lines 1-2].

Referring to claim 22, Microsoft 1999 teaches the conditional access (CA) system of claim 21 wherein the second CA protocol interfaces to a smart card [page 5-6, Device Drivers, lines 4-5].

Referring to claim 23, Microsoft 1999 teaches the conditional access (CA) system of claim 20 wherein the third computing resource configured to couple the first computing resource to the second computing resource is further configured such that the second CA protocol is substantially compliant with the first CA protocol [page 5, Resource Manager, lines 1-3].

Referring to claim 24, Microsoft 1999 teaches the conditional access (CA) system of claim 20 wherein the first computing resource, the second computing resource, and the third computing resource execute code on a single processor [page 5, Resource Manager, line 1].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft 1999 in view of U.S. Patent No. 6,040,851 to Cheng et al..

Referring to claim 3, Microsoft 1999 teaches all limitations of claim 3 except wherein the CA protocol is selected from the group consisting of National Renewable

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Security Standard Part B (NRSS-B), OpenCable™ Host Point Of Deployment Interface Specification (POD), Common Interface Specification for Conditional Access and other Digital Video Broadcasting Decoder Applications (CI), and Conditional Access System for Terrestrial Broadcast (ATSC-A70).

However, Cheng et al. (Cheng) disclose a CA protocol is selected from the group consisting of National Renewable Security Standard Part B (NRSS-B), OpenCable™ Host Point Of Deployment Interface Specification (POD), Common Interface Specification for Conditional Access and other Digital Video Broadcasting Decoder Applications (CI), and Conditional Access System for Terrestrial Broadcast (ATSC-A70) [column 4, lines 33-34].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Cheng's teaching to the system and method of Microsoft 1999, such that Microsoft's system would include a NRSS-B conditional access protocol. One would have been motivated to modify Microsoft's system as such in order to increase compatibility [column 4, line 30].

Referring to claim 15, Microsoft 1999 as modified teach the method of claim 13 wherein the conditional access protocol is a standard conditional access protocol [column 4, lines 33-34 of Cheng et al.].

Referring to claim 16, Microsoft 1999 as modified teach the method of claim 15 wherein the standard conditional access protocol is selected from the group consisting of National Renewable Security Standard Part B (NRSS-B), OpenCable™ Host Point Of

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Deployment Interface Specification (POD), Common Interface Specification for Conditional Access and other Digital Video Broadcasting Decoder Applications (CI), and Conditional Access System for Terrestrial Broadcast (ATSC-A70) [column 4, lines 33-34 of Cheng et al.].

Referring to claim 17, Microsoft 1999 teaches a conditional access (CA) system comprising:

- an ISO 7816 smart card interface [page 2, ISO 7816, EMV, and GSM, lines 1-3]; and
- a software wrapper configured to execute on a second computing resource to couple the ISO 7816 smart card interface to the protocol [page 3, Software Development, line 1].

Microsoft 1999 does not teach a conditional access (CA) system comprising:

- a first computing resource configured to execute a NRSS-B protocol and
- a second computing resource to couple the ISO 7816 smart card interface to the NRSS-B protocol.

However, Cheng et al. disclose a conditional access (CA) system comprising:

- a first computing resource configured to execute a NRSS-B protocol [column 5, lines 31-33]; and
- a second computing resource to couple the ISO 7816 smart card interface to the NRSS-B protocol [column 5, lines 34-37].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Cheng's teaching to the system and method of Microsoft

1999, such that Microsoft's system would include a NRSS-B conditional access protocol. One would have been motivated to modify Microsoft's system as such in order to increase compatibility [column 4, line 30].

Referring to claim 18, Microsoft as modified teach the system of claim 17 wherein the first computing resource and the second computing resource are a same computing resource [page 5, Cards, paragraph 3, lines 6-8].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Contents Protection System Using Smart Card Interface for Digital CATV Network Based on the OpenCable Specification to Song et al.
- An overview of multimedia content protection in consumer electronics devices to Eskicioglu et al.
- The ATSC Standard for Conditional Access to Heredia.
- U.S. Patent No. 6,409,089 to Eskicioglu


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Bowes whose telephone number is 703-305-0326. The examiner can normally be reached on 7:30-4:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

seb
2/5/2004


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